



A Leader in High-Efficiency “Green” Power Solutions, Including Renewable Energy

With its focus on Renewable Energy and “Green” power solutions, Power-One has recently established itself as the world’s second largest provider of solar inverters. Further, as one of the world’s ten largest providers of power conversion and power management solutions, Power-One is one of the few companies with the product breadth to support every step in the refinement of utility-grade AC into the various DC voltages required to power high-availability infrastructure systems at the site, system, and semiconductor levels. In addition, we’re increasing the availability of our renewable energy solar and wind inverter products featuring industry-leading features and performance, while offering easier installation, better customer service, unmatched applications flexibility, and field-proven reliability.

Power-One’s focus on high-efficiency “green” power solutions has proven to provide a wide range of customer benefits:

- Reduced energy consumption.
- Improved energy harvesting in alternative-energy applications.
- Increased power densities.
- Better performance in elevated ambient-temperature environments.
- Less dissipated heat lowers system and site-level cooling costs.

Power Management and Conversion across a Wide Range of Applications



Data and Voice Communications

Renewable-Energy Inverters

Intelligent Controls



Digital Power Management

Servers and Data Storage

Instrumentation, Industrial, and ATE

Power-One’s evolution into a tier-one supplier, competitive on a world-class level, has been facilitated by a complement of strategies and milestones:

- Support for global customers, and local markets, with strategically-located manufacturing and R&D facilities.
- Consistent investment in R&D to provide industry-leading energy efficiencies, and breakthrough solutions such as our digital power management technologies and world-class inverters.
- Continuously improving the key attributes required to grow our business with strategic customers and distributors.
- Pursuit of fast-growth markets: digital power, servers, customs, alternative energy, and intelligent controls.

Power-One employs thousands of people worldwide and is certified to ISO standards for all facilities. Customer support, R&D centers, and manufacturing operations are strategically located in the Americas, Asia, and Europe. Corporate headquarters are located in Camarillo, CA.



Power-One Solar Inverters

Power-One, a world leader in solar inverter production, offers a full range of inverters for solar installations ranging from small residential to large solar farms. Solar inverters are an integral part to any solar power installation and convert the solar panel power output to usable voltages which can be consumed or supplied back to the utility electric grid. Solar inverters play a key role in a solar power installation's effectiveness and special attention should be paid to solar inverter selection.

The power available from a solar installation is affected by the inverter's ability to harvest the power and efficiently convert it to alternating current (AC) power. Solar panel power generation is proportional to the amount of sunlight or photons that they receive and are affected by the intensity of the sunlight, the angle of the sunlight and any shading from clouds or shadows. Power-One has a low input voltage that supports power production at lower solar intensity such as at dawn and dusk, extending the daily usable power production time.

Solar inverters affect the total energy harvested by operating at the maximum power point of the solar panels power curve. Solar panel power output is affected by the sunlight intensity, shading, temperature and total resistance. Power-One's Maximum Power Point Tracking (MPPT) algorithm adjusts the electrical load as seen by the solar panels to operate at the maximum power point of the solar cells. The solar inverters continuously scan the solar panel output and adjust to operate at the maximum power point.

The third major component to maximizing the power output of a solar installation is to utilize high efficiency solar inverters. Efficiency is the measure of power out of the inverter as a percentage of the power into the inverter. Thus, high efficiency solar inverters use less of power in the conversion process and supply more of the power for use.

For residential installations, the single phase Aurora™ Uno solar inverters range from [300W micro-inverters to 6kW string inverters](#).

For commercial installations, the larger triple phase Aurora Trio solar inverters, the three phase [Aurora Trio solar inverters](#) ranging from 10kW to 27.6kW, and the [central inverters](#) can be provide optimized solutions.

For utility solar farms, Power-One's central inverters provide [power for up to 1.3MW](#) in a prefabricated weatherproof cabin to enable simple and speedy installation.

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